

HERCULES INCORPORATED -- PROPELLANT,EXPLOSIVE,SOLID,M6+2F/76MM --
1376-00N010938

===== Product Identification =====

Product ID:PROPELLANT,EXPLOSIVE,SOLID,M6+2F/76MM

MSDS Date:01/09/1986

FSC:1376

NIIN:00N010938

MSDS Number: BHVKT

=== Responsible Party ===

Company Name:HERCULES INCORPORATED

Address:RADFORD ARMY AMMUNITION PLANT

City:RADFORD

State:VA

ZIP:24141

Info Phone Num:703-639-7294

Emergency Phone Num:703-639-7294

CAGE:2D295

=== Contractor Identification ===

Company Name:HERCULES INC

Address:RADFORD ARMY AMMUNITION PLANT

Box:City:RADFORD

State:VA

ZIP:24141

Country:US

Phone:703-639-7294

CAGE:2D881

Company Name:HERCULES INCORPORATED

Address:84 5TH AVE

City:NEW YORK

State:NY

ZIP:10011-7603

Country:US

CAGE:2D295

===== Composition/Information on Ingredients =====

Ingred Name:DIBUTYL PHTHALATE (SARA III)

CAS:84-74-2

RTECS #:TI0875000

Fraction by Wt: 3.00%

Other REC Limits:N/K

OSHA PEL:5 MG/M3

ACGIH TLV:5 MG/M3; 9192

EPA Rpt Qty:10 LBS

DOT Rpt Qty:10 LBS

Ingred Name:DIPHENYLAMINE

CAS:122-39-4

RTECS #:JJ7800000

Fraction by Wt: 1.00%

Other REC Limits:N/K

OSHA PEL:10 MG/M3

ACGIH TLV:10 MG/M3; 9192

Ingred Name:POTASSIUM SULFATE

CAS:7778-80-5
RTECS #:TT5900000
Fraction by Wt: 2.00%
Other REC Limits:N/K
OSHA PEL:N/K
ACGIH TLV:N/K

Ingred Name:NITROCELLULOSE (FLAMMABLE SOLID)
Fraction by Wt: 87.00%
Other REC Limits:N/K
OSHA PEL:N/K
ACGIH TLV:N/K

Ingred Name:DINITROTOLUENE (SARA III)
CAS:25321-14-6
RTECS #:XT1300000
Fraction by Wt: 10.00%
Other REC Limits:N/K
OSHA PEL:S;A2;0.15 MG/M3;9293
ACGIH TLV:S, 1.5 MG/M3
EPA Rpt Qty:10 LBS
DOT Rpt Qty:10 LBS

===== Hazards Identification =====

LD50 LC50 Mixture:N/K
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:SEE SIGNS AND SYMPTOMS OF
OVEREXPOSURE.

Explanation of Carcinogenicity:NONE
Effects of Overexposure:EYES:N/K .SKIN:TOXIC,AVOID SKIN
CONTACT.INGESTION:TOXIC,AVOID INGESTION.INHALATION:TOXIC,AVOID
INHALATION.

Medical Cond Aggravated by Exposure:N/K

===== First Aid Measures =====

First Aid:EYES:IN CASE OF CONTACT,IMMEDIATELY FLUSH WITH PLENTY OF LOW
PRESSURE WATER FOR AT LEAST 15 MINUTES.REMOVE ANY CONTACT LENSES TO
ASSURE THOROUGH FLUSHING.CALL A PHYSICIAN.SKIN:WASH WITH SOAP AND
RUNNING WATER.INGESTION:CONTACT MD IMMEDIATELY .INHALATION:REMOVE
TO FRESH AIR.TREAT ANY IRRITATION SYMPTOMATICALLY.CALL A PHYSICIAN.

===== Fire Fighting Measures =====

Extinguishing Media:SELF-OXIDIZING,DELUGE W/ H*2O.MAY NOT BE ABLE TO
EXTING MATL BEFORE IT IS CONSUMED UNLESS LRG QTY USED IN SHORT
TIME.

Fire Fighting Procedures:USE NIOSH/MSHA APPROVED SCBA AND FULL
PROTECTIVE EQUIPMENT .EVACUATE THE AREA.

Unusual Fire/Explosion Hazard:EASILY IGNITED,HIGHLY COMBUSTIBLE;PROTECT
FROM FIRE,SPARKS & EXTREME HEAT.AUTOIGNITION
TEMP:383F,195C.HAZARDOUS DECOMPOSITION PRODUCTS:OXIDES OF CARBON.

===== Accidental Release Measures =====

Spill Release Procedures:CLEAN UP SPILLS IMMEDIATELY USING A SOFT BRISTLE BRUSH AND A CONDUCTIVE RUBBER OR PLASTIC SHOVEL.USE CAUTION,MATERIAL SENSITIVE TO IMPACT,FRICITION AND ELECTROSTATIC DISCHARGE.

Neutralizing Agent:N/K

===== Handling and Storage =====

Handling and Storage Precautions:AVOID PRLNG TEMP ABOVE 50C,125F.REC:21C,75F;50% HUMIDITY.STOR MUST CONFORM TO LOCAL,STATE,FEDERAL REGS (OSHA 29CFR1910.109;BATF 27CFR55 SUBPART K) .

Other Precautions:WARNING,FLAMMABLE SOLID.KEEP AWAY FROM HEAT,SPARKS AND OPEN FLAME.KEEP CONTAINERS CLOSED.USE WITH ADEQUATE VENTILATION.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:NIOSH/MSHA APPROVED RESPIRATOR APPROPRIATE FOR EXPOSURE OF CONCERN .

Ventilation:LOCAL AND GENERAL VENTILATION NECESSARY TO KEEP AIR CONCENTRATION BELOW TLV .

Protective Gloves:COTTON OR LEATHER.

Eye Protection:SAFETY GLASSES

Other Protective Equipment:FLAMEPROOF COVERALLS AND CONDUCTIVE SHOES.

Work Hygienic Practices:N/K

Supplemental Safety and Health

ROUTES OF ENTRY:INGEST/SKIN/INHAL .

===== Physical/Chemical Properties =====

Melt/Freeze Pt:M.P/F.P Text:N/K

Decomp Temp:Decomp Text:N/K

Vapor Pres:NEGLIGIBLE

Spec Gravity:1.4955,WATER=1

Evaporation Rate & Reference:<1 (BUTYL ACETATE=1)

Solubility in Water:NEGLIGIBLE

Appearance and Odor:HARD CYLINDER,PERFORATED,SMOOTH,GREENISH YELLOW COLOR.ODORLESS.

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

OXIDES OF NITROGEN AND CARBON.

Stability Condition to Avoid:AVOID OPEN FLAME,SPARKS AND HEAT.

Hazardous Decomposition Products:OXIDES OF CARBON.

===== Disposal Considerations =====

Waste Disposal Methods:DISPOSAL MUST BE IN ACCORDANCE WITH FEDERAL,STATE AND LOCAL REGULATIONS .BURN IN OPEN BURNING GROUND IN ACCORDANCE WITH REGULATIONS.MAY ALSO BE BURNED IN AN INCINERATOR APPROVED FOR EXPLOSIVES.

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